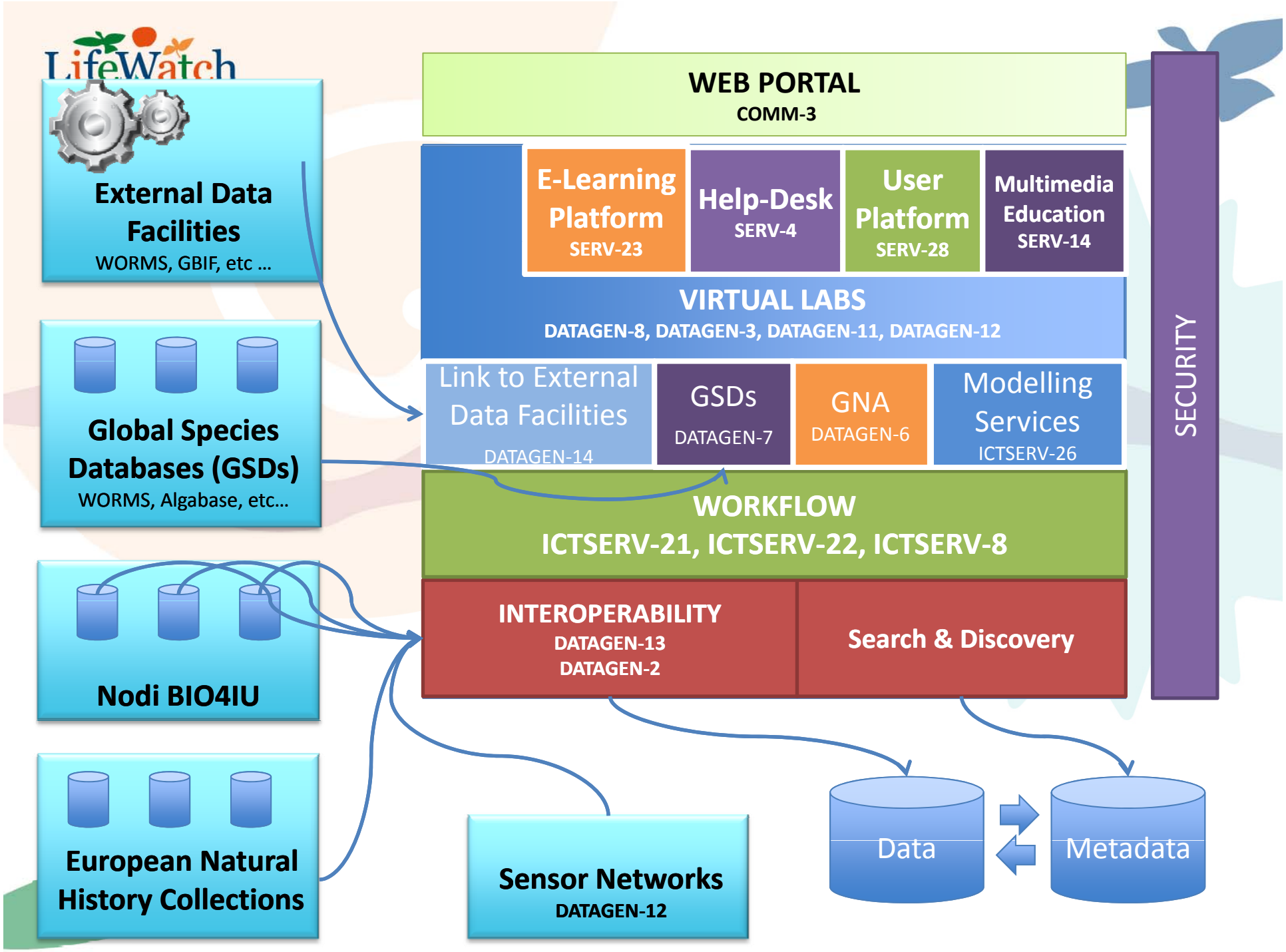
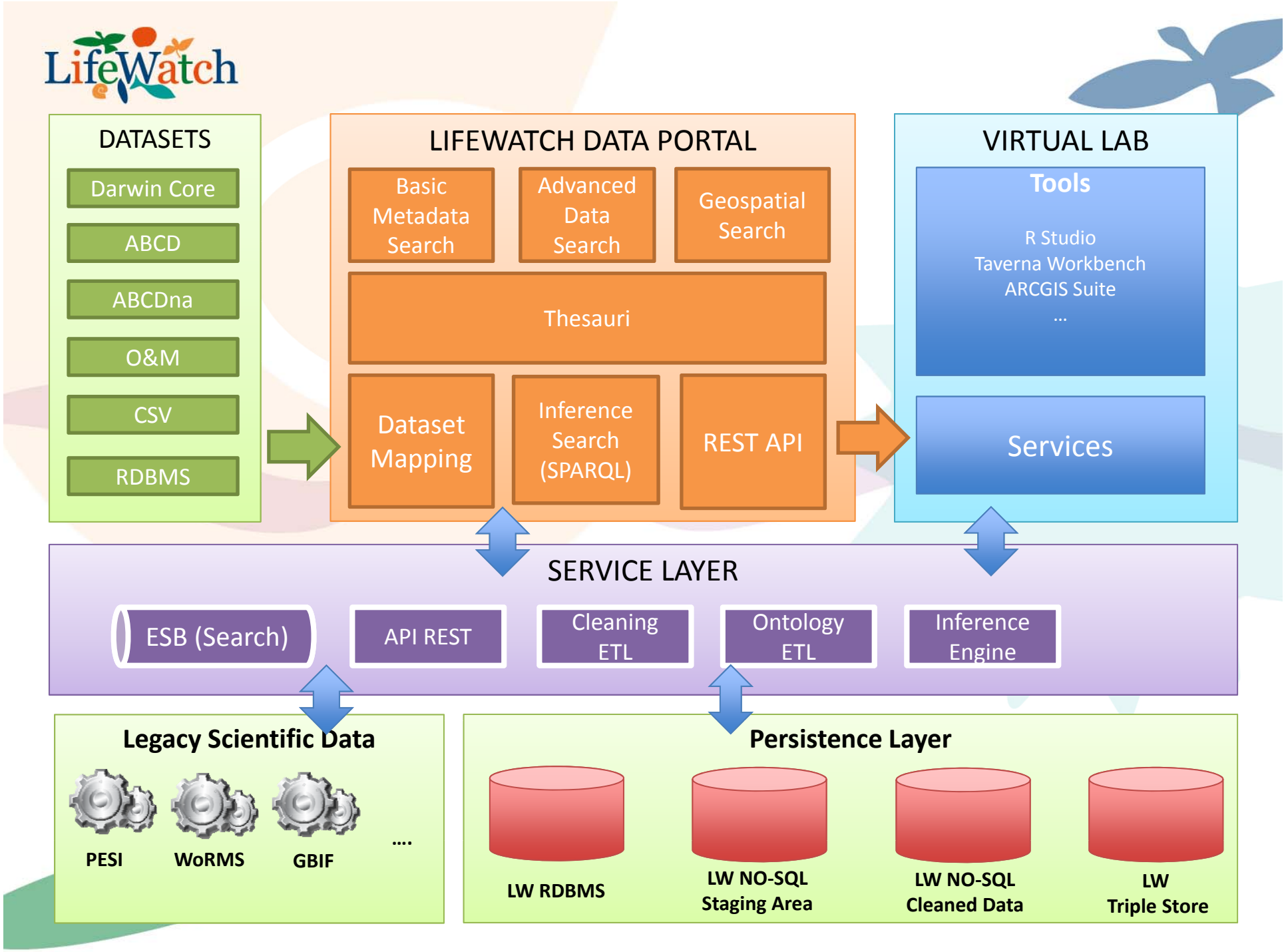
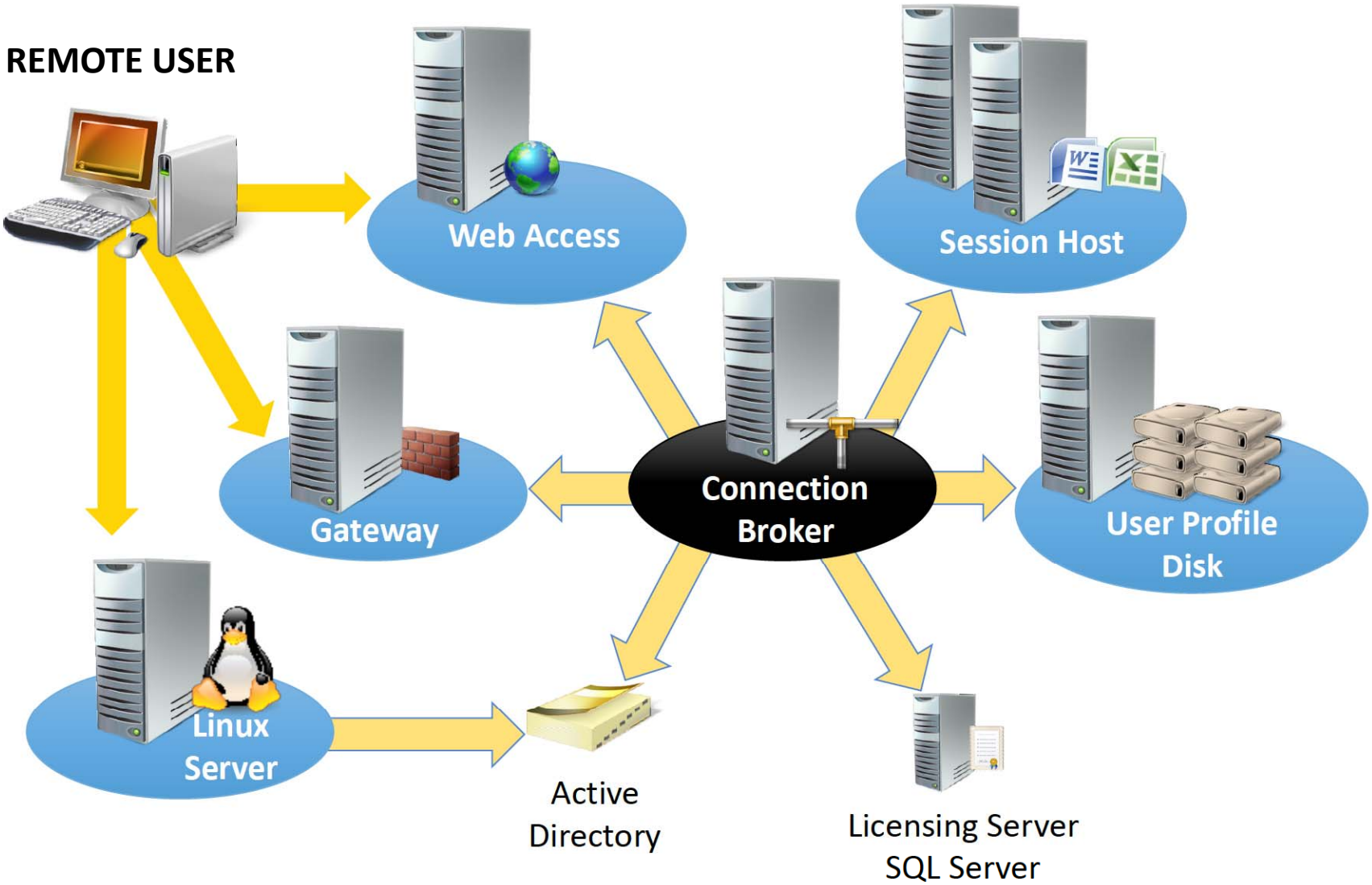
Alien Species Virtual Research Environment & Services and OutReach

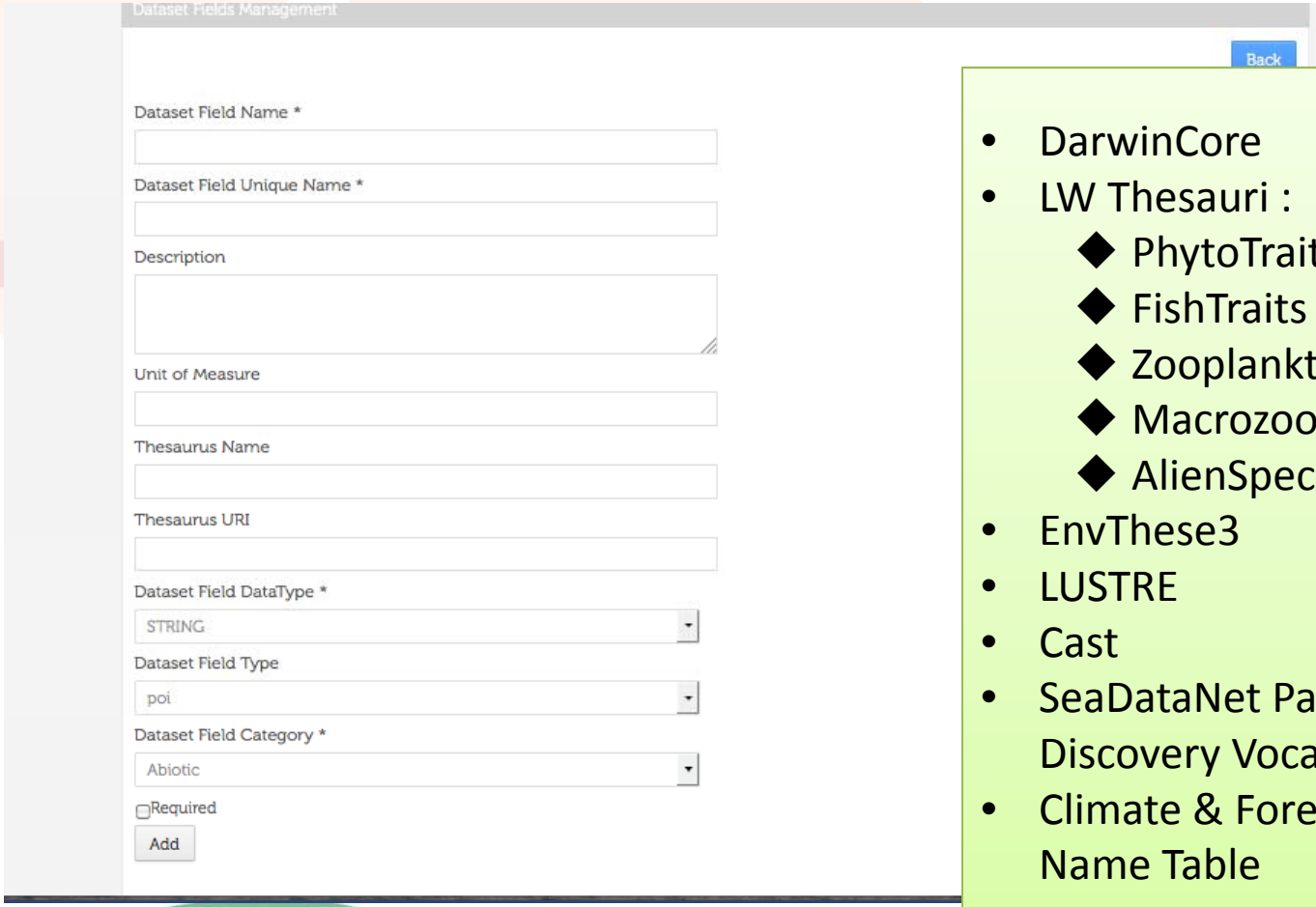
Nicola Fiore
LW Service Centre


LifeWatch
External Data Facilities
WORMS, GBIF, etc ...
Global Species Databases (GSDs)
WORMS, Algabase, etc...
Nodi BIO4IU
European Natural History Collections
Sensor Networks
DATAGEN-12
WEB PORTAL
COMM-3
E-Learning Platform
SERV-23
Help-Desk
SERV-4
User Platform
SERV-28
Multimedia Education
SERV-14
VIRTUAL LABS
DATAGEN-8, DATAGEN-3, DATAGEN-11, DATAGEN-12
Link to External Data Facilities
DATAGEN-14
GSDs
DATAGEN-7
GNA
DATAGEN-6
Modelling Services
ICTSERV-26
WORKFLOW
ICTSERV-21, ICTSERV-22, ICTSERV-8
INTEROPERABILITY
DATAGEN-13
DATAGEN-2
Search & Discovery
SECURITY
Data
Metadata


LifeWatch
DATASETS
Darwin Core
ABCD
ABCDna
O&M
CSV
RDBMS
LIFEWATCH DATA PORTAL
Basic Metadata Search
Advanced Data Search
Geospatial Search
Thesauri
Dataset Mapping
Inference Search (SPARQL)
REST API
VIRTUAL LAB
Tools
R Studio
Taverna Workbench
ARCGIS Suite
...
Services
SERVICE LAYER
ESB (Search)
API REST
Cleaning ETL
Ontology ETL
Inference Engine
Legacy Scientific Data
PESI
WoRMS
GBIF
....
Persistence Layer
LW RDBMS
LW NO-SQL Staging Area
LW NO-SQL Cleaned Data
LW Triple Store


REMOTE USER
Web Access
Session Host
Gateway
Connection Broker
User Profile Disk
Linux Server
Active Directory
Licensing Server
SQL Server

Data Standardization

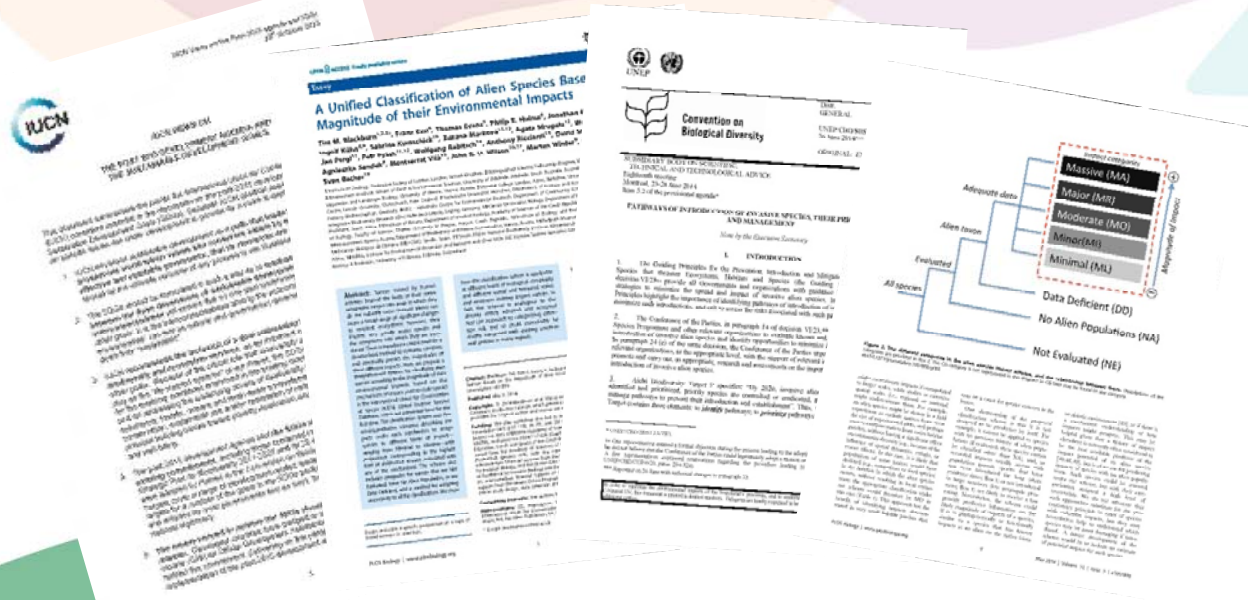


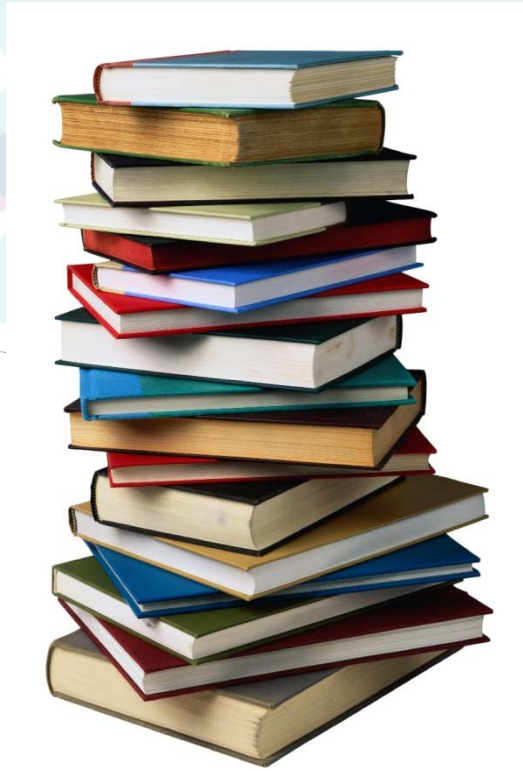
- DarwinCore
- LW Thesauri :
  - PhytoTraits
  - FishTraits
  - ZooplanktonTraits
  - MacrozoobenthosTraits
  - AlienSpecies
- EnvThese3
- LUSTRE
- Cast
- SeaDataNet Parameter Discovery Vocabulary
- Climate & Forecast Standard Name Table

Alien Species: Thesaurus

http://openskos.lifewatchitaly.eu/AlienSpecies/

- 380 Terms
- 221 Definitions
- 195 Bibliographic references





Alien Species: Thesaurus

Main categorization

- ⊟ Alien Species
  - ⊞ Control
  - ⊞ Eco domains alien species
  - ⊞ Impact
  - ⊞ Pathway
  - ⊞ <Status and Trends>
  - ⊞ Surveillance

It includes the definitions of alien species according to the papers published by the LifeWatch-Italy community

Meta-term including information on Establishment, Invasiveness, Propagule pressure, Residence Time, etc.

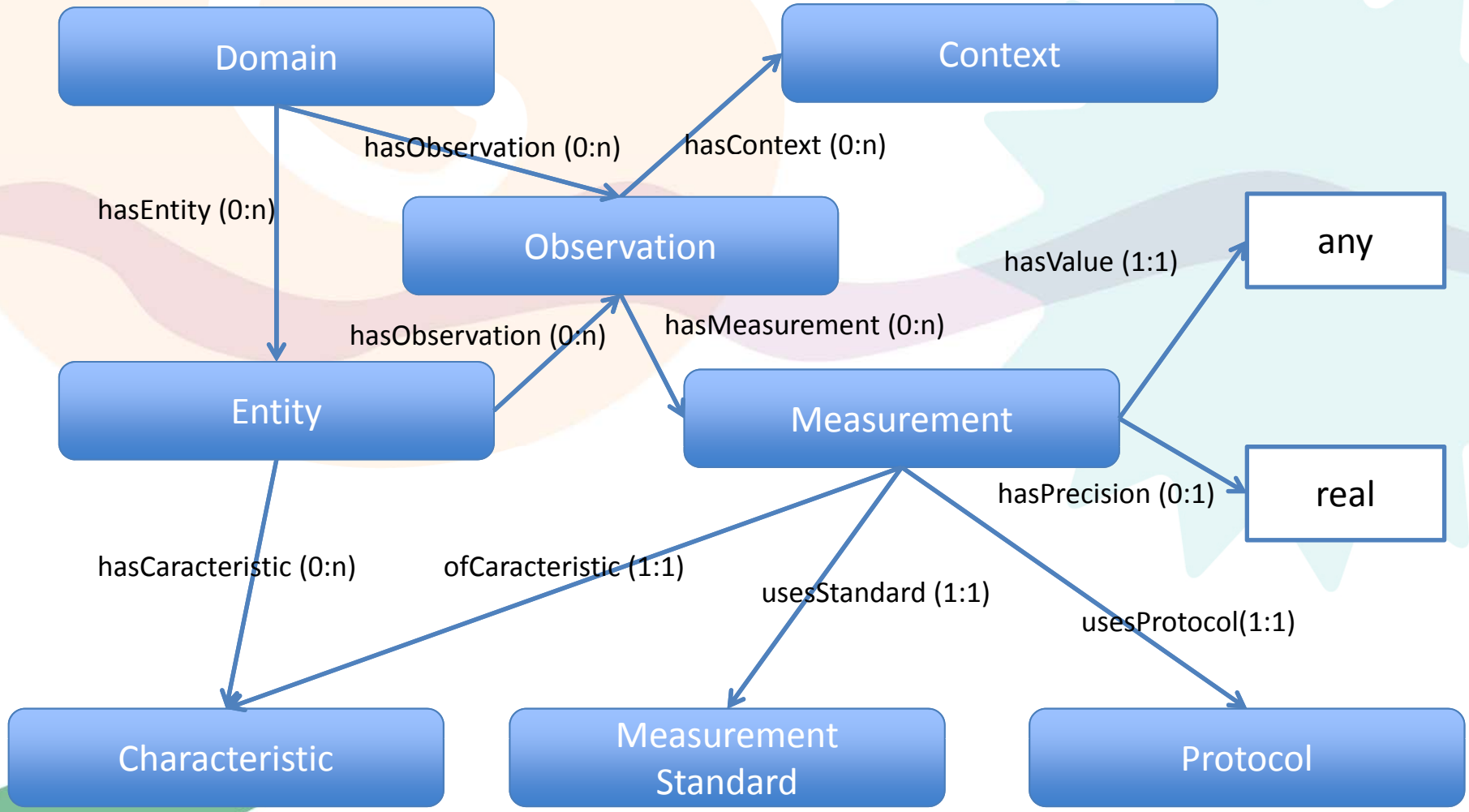
Data Standardization

Dataset Fields Management

New Field

Name	Unique Name	Type
DatasetId	dataset id	String
DatasetName	dataset name	String
DateIdentified	date identified	Datetime
Day	day	Integer
DecimalLatitude	decimal latitude	Double
DecimalLongitude	decimal longitude	Double
Density	density	Double
DimensionlessShapeIndex	dimensionless shape index	Double
Disposition	disposition	String
DissolvedInorganicNitrogen	dissolved inorganic nitrogen	Double
DissolvedOrganicCarbon	dissolved organic carbon	Double
DissolvedOxygen	dissolved oxygen	Double
DorsalFinLength	dorsal fin length	Double
DryWeigth	dry weigth	Double

DATA STANDARDIZATION
LIFEWATCH – ONTOLOGY



Metadata Management

Dataset Metadata Management

New Metadata

		Metadata
		Name: Dataset title **Unique name:** datasettitle **Category:** General **Type:** String **Reference:** http://data.lter-europe.net/deims/dataset/documentation#D1
		Name: Dataset identifier **Unique name:** datasetidentifier **Category:** General **Type:** String
		Name: Full name of a creator **Unique name:** fullnameofacreator **Category:** General **Type:** String **Reference:** http://data.lter-europe.net/deims/dataset/documentation#D3
		Name: Full name of a contact point **Unique name:** full name of a contact point **Category:** General **Type:** String

Data Quality – Taxonomic Cleaning

HOME DATA RESOURCES DATA UPLOADING MY LIFEWATCH SERVICE CATALOGUE TOOL CATALOGUE

ADMINISTRATION VIRTUAL LABS HELP & TRAINING

Global Names Architecture

Return

Scientific Name	Kingdom	Phylum	Class	Order	Family
Leptochelia savignyi		Arthropoda		Tanaidacea	Leptocheliidae

-

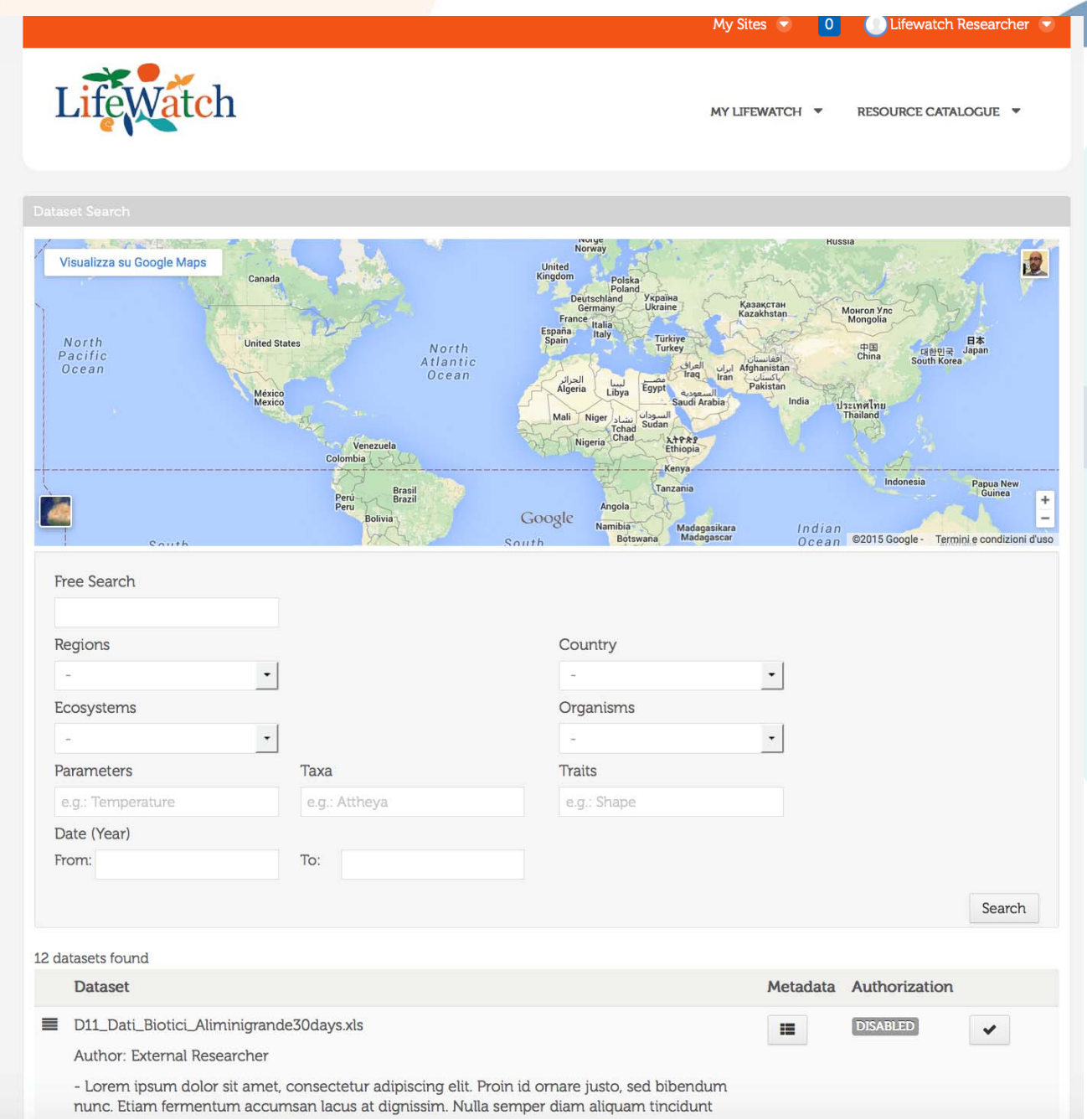
PROVIDER	Scientific Name	Kingdom	Phylum	Class	Order	Family	Status	Synonyms		
WoRMS	Leptochelia savignyi	Animalia	Arthropoda		Tanaidacea	Leptocheliidae	accepted	Synonyms	Import	Update
PESI	Leptochelia savignyi	Animalia	Arthropoda	Malacostraca	Tanaidacea	Leptocheliidae	accepted	Synonyms	Import	Update

Powered By Liferay

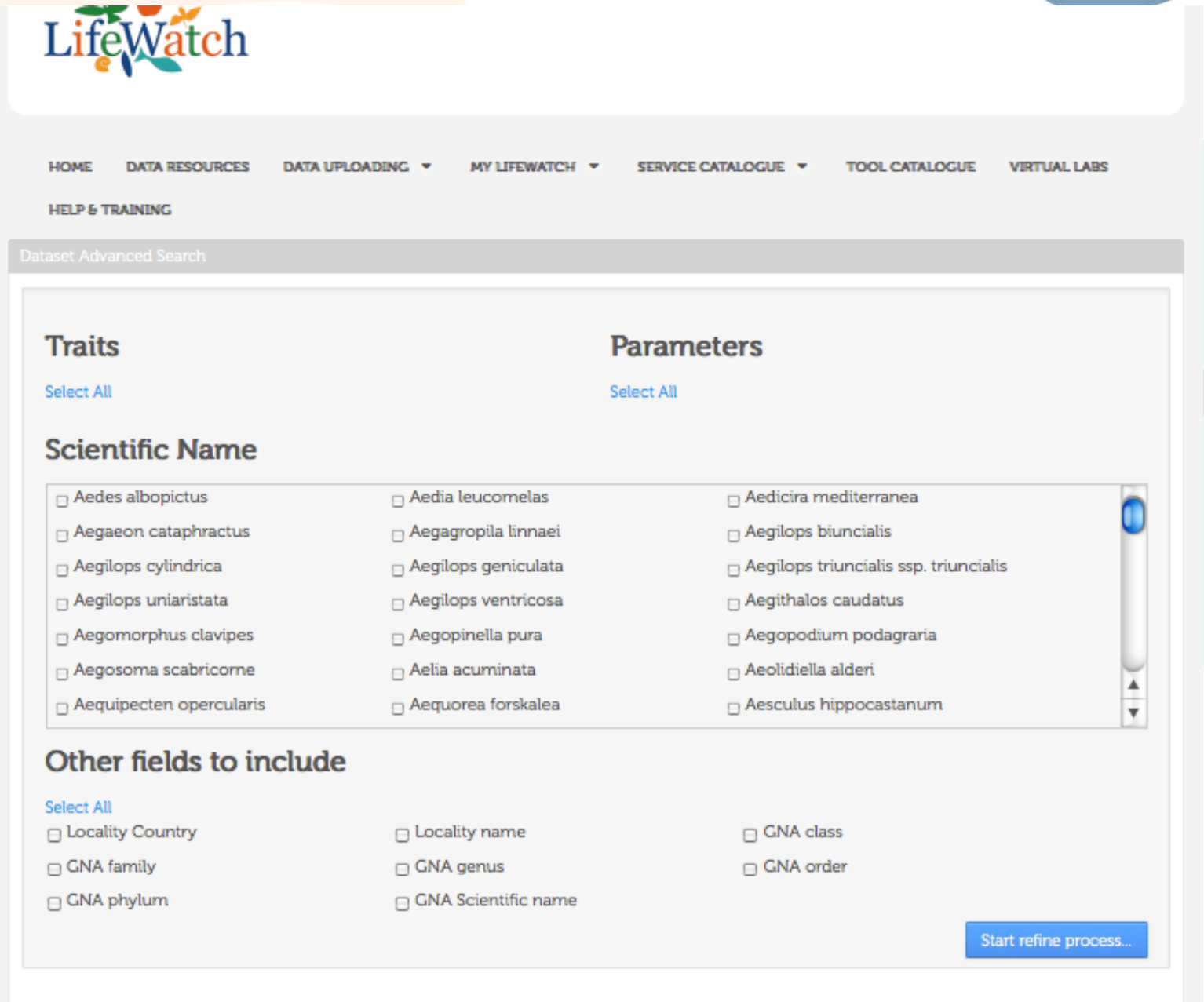
Data Quality – Semantic Cleaning

Work in Progress

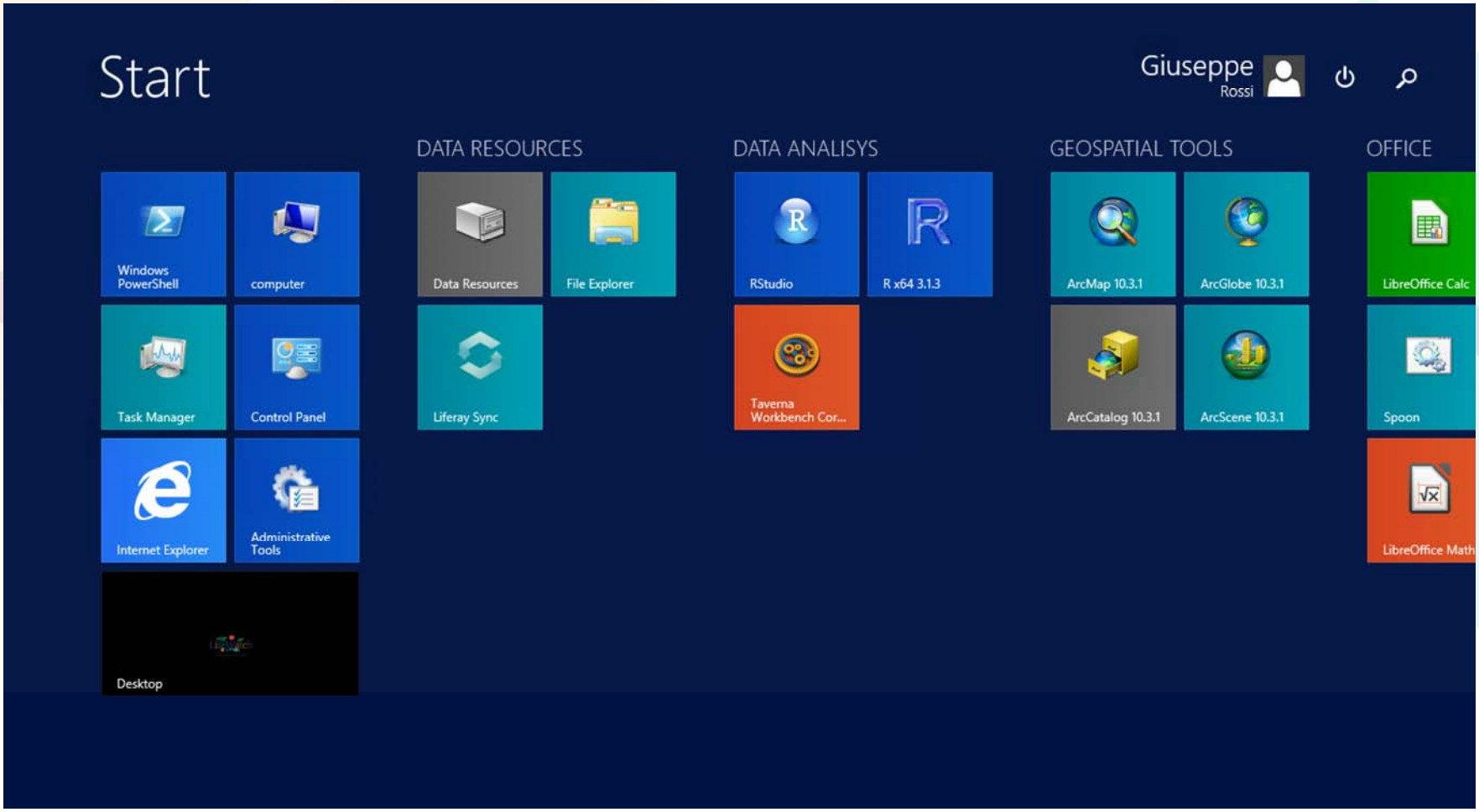
DATA PORTAL - Search



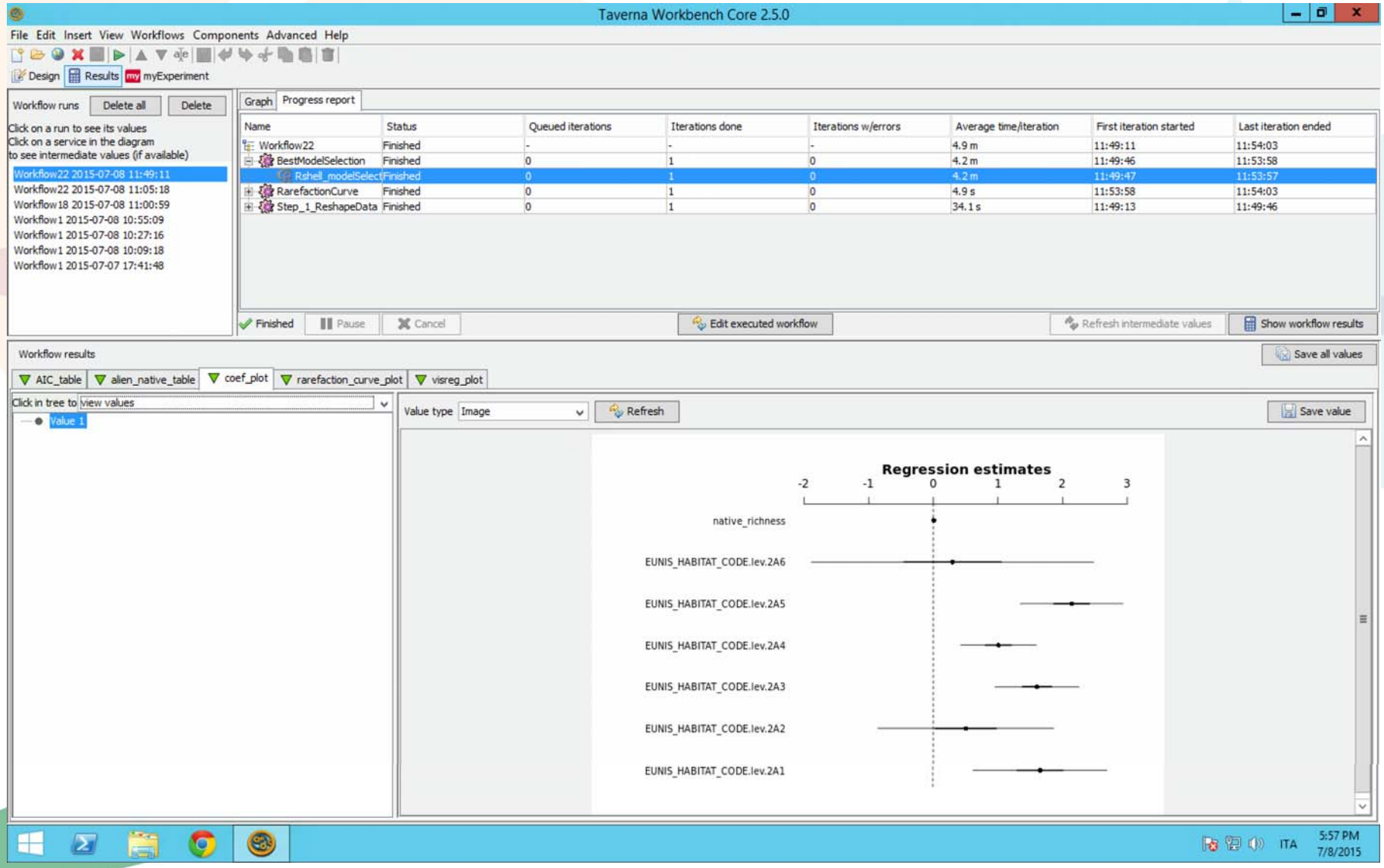
DATA PORTAL – Advanced Search



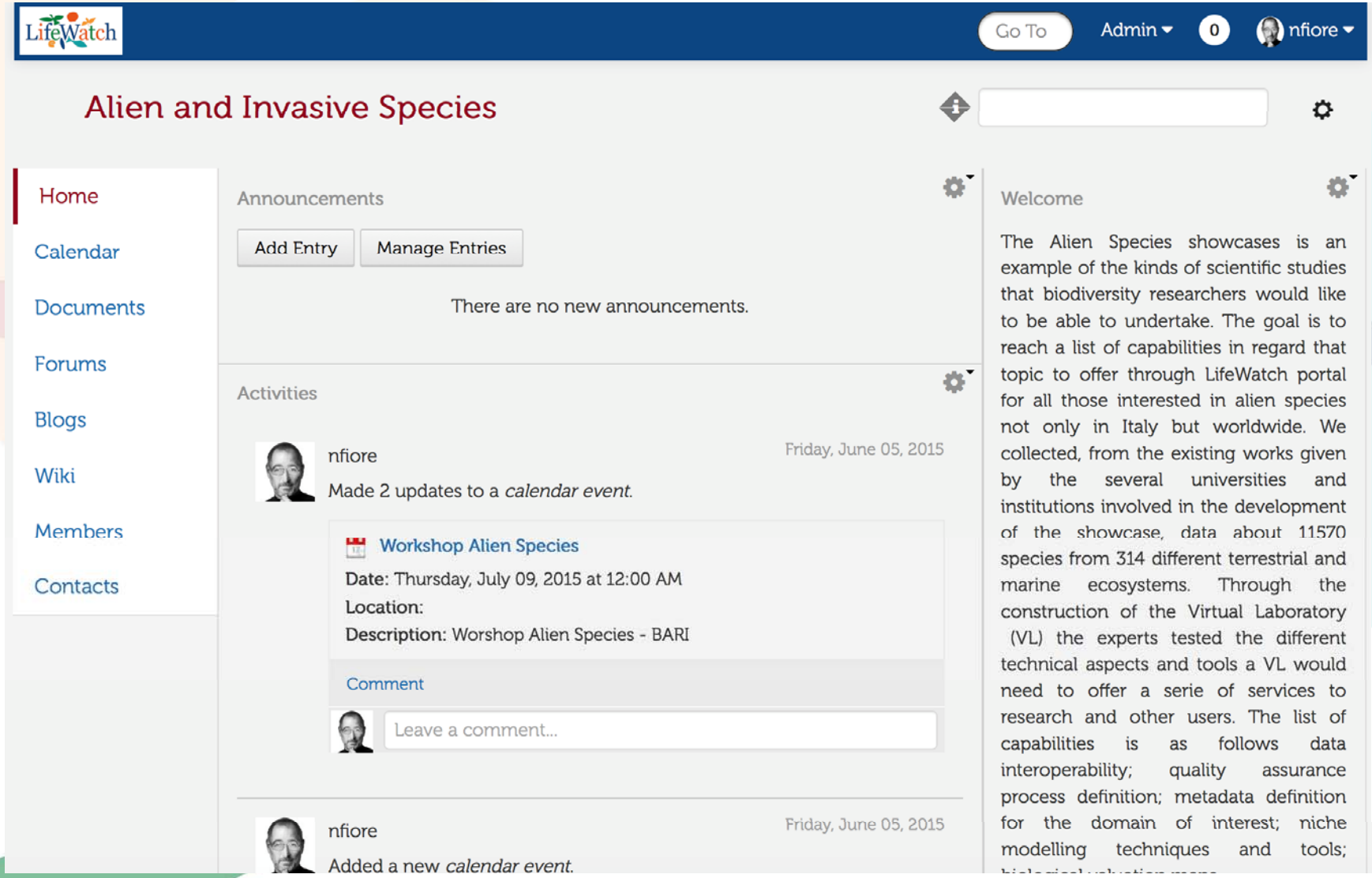
Alien Species: VRE



Alien Species: VRE



Alien Species: USER PLATFORM



EEF 2015
Conference

21-25 September 2015

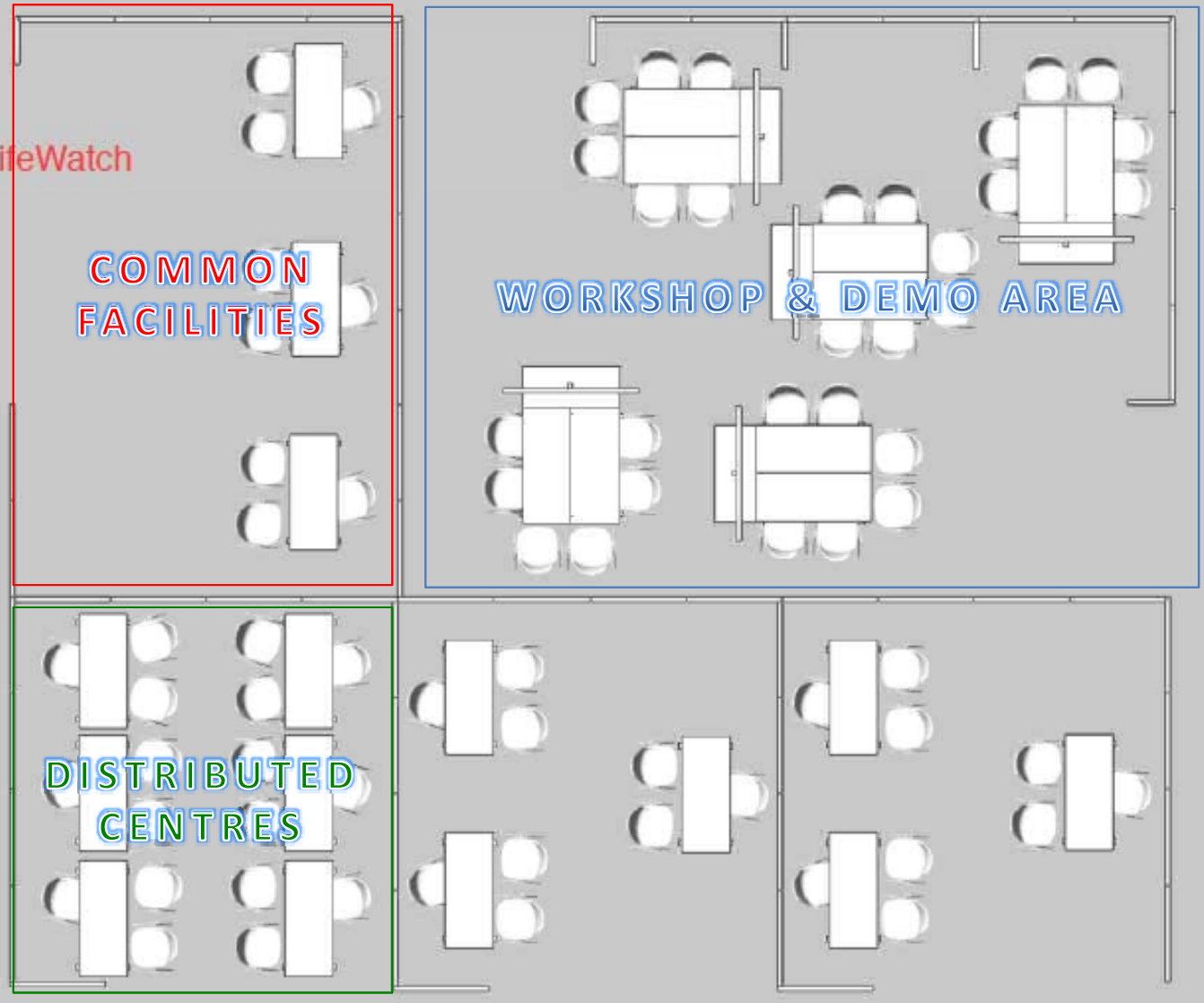
http://www.ecologyatinterface.eu/

Pianta Stand LifeWatch

5 tv screens

Posters on the walls

Rollups



24 September 2015 – LW Workshop & Demos

Each country participating will have a slot of 40’ to present its demos.
The setting of the common space will then allow to have “parallel demos” if you wish. However, should you wish to have more sessions, it would be possible to book other slots in the common space during the other days of the conference.
In case please get back to Sara and Nicola and we will take care of arranging it coherently with other requests.

24 September 2015 – LW Workshop & Demos – Schedule

Number of demo	Country	Subject	Duration	Schedule
5	Service Centre	Portal	40'	09:000-9:40
2	Spain	access to LifeWatch cloud-based infrastructure supporting the deployment of VRE, Demonstration of applications: water resources management (SWIRL), water quality including the example of algae bloom in water reservoir (hydrodynamics and cyano grow), as well as other LW-ES related applications (pipeline for transcriptomes, monitoring air quality in Pyrinees zone, RESPIRA, etc.), Demonstration of LW VRE : marine, non-marine, invasive species.	40'	10:30 11:10
6	Belgium	Demo about GPS bird tracking network, Demo about fish acoustic receiver network, Demo about ZooScan and Video Plankton Recorder, Demo about phytoplankton flow cytometer, Demo about Microbial Antarctic Resource System (mARS), Demo about modelling tool of the Biogeographic Atlas of the Southern Ocean	40'	15:00-15:40
2	Italy	Alien Species, CollMap, Thesaurus, Mobilab	40'	16:00-16:40
2	Sweden	One demo will explain how to use the SLW infrastructure for marine invasive research, while the other will explain how to use the Swedish Analysis Portal to mine biodiversity data.	40'	17:30-18:10
	Greece????			

We kindly ask you to please:

- confirm your availability for the slot allocated to your team, titles of your demo(s) and presenter details
- details of the stand holder(s)
- send a list of the printed materials you intend to distribute or show
- send a Wetransfer file with all digital materials you intend to show.

Biodiversity is life
Biodiversity is our life